

TAMS 60488 GPIB card is designed to work only by using SICL function calls. These are specified by Agilent Technologies in their TULIP driver implementation, which is not compatible with the way National Instruments control their cards.

However, now the National Instruments implementation supports cards that work using VISA function calls. VISA stands for "Virtual Instrument Software Architecture" and is a protocol that works on top of SICL. Therefore, our card will work under LabView using VISA.

The following is a solution to get TAMS GPIB card working with LabWindows/CVI, LabView, and Measurement Studio.

Procedure:

Make sure you have National's NI-VISA 2.5 libraries or later but do not install it yet. The libraries are available from the National Instruments website.

In order to download the libraries please do the following:

- Go to <u>www.ni.com</u>
- Type NI-VISA download in the upper right box next to search entire site.
- Click on: GO
- Click on: NI-VISA version 3.0.1 for Windows 2000/98/ME/NT/XP HWDRIVER
- Click on: continue download process

Then you will need to register for free by creating a profile. If you already have a profile with National Instruments, you do not need to do it again. Use the registered e-mail and password you have for your NI profile.

Once you have done all this, you should be able to download the libraries.

NOTE: NI-VISA will not configure the TAMS hardware; you must still do that with the Agilent I/O Config utility.

Open the I/O Config utility under (Start->Programs->Agilent IO libraries) and make sure to configure the TAMS card by using the icon TAMS 60488 under available interfaces. If you have already configured the TAMS 60488 card, please continue with the next step.

Next, go ahead and uninstall the Agilent IO Libraries and remove everything except SICL.

To do that, go to control panel and click on add/remove programs. Then from the list double click on Agilent IO libraries and click on Modify on a window like this:

InstallShield	Wizard ×		
Agilent IO Li version J.01	ibraries .01.00		
Welcome to the current i	the Agilent IO Libraries Setup Maintenance program. This program lets you modify nstallation. Click one of the options below.		
⊙ <u>Modify</u>	Select new program components to add or select currently installed components to remove.		
O R <u>e</u> pair	Reinstall all program components installed by the previous setup.		
O <u>R</u> emove	Remove all installed components.		
InstallShield	< Back Next > Cancel		

Then click on Next and you should get a window like this:

InstallShield Wizard	×
Agilent IO Libraries version J.01.01.00	
Select the components you want to install, and install.	d clear the components you do not want to Description Agilent SICL IO Library
Space Required on C: Space Available on C: 14 InstallShield	0 K 130284 K
	< <u>B</u> ack <u>N</u> ext> Cancel

Then uncheck everything except SICL and its sub-folders.

Click on next and follow the instructions on your screen.

Close all the windows and install the NI-VISA libraries.

After the NI-VISA libraries installation, go into the Measurement & Automation Explorer, select "Tools>>NI-VISA>>VISA Options", choose the Passports tab, and enable the NiVisaTulip.dll Passport.

NI-VISA will automatically find and access any TAMS GPIB devices.

If you have both National Instruments and TAMS controllers in the same system, you must configure the cards at different system addresses, such as GPIB0 and GPIB1. If both vendors try to use the same interface address, NI-VISA will report an error from viFindRsrc or VISA Find Resources.

Once you are finished, you should be able to send commands to the TAMS 60488 card from LabView by using the VISA name you chose for the TAMS 60488 card when you configured it using the IO Config utility.